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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,087	03/30/2004	Akitaka Makino	648.43120CX1	3009

20457 7590 03/30/2005

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EXAMINER
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MOORE, KARLA A

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/812,087

Applicant(s)

MAKINO ET AL.

Examiner

Karla Moore

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0304.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,884,009 to Okase.

3. Okase discloses a vacuum processing apparatus in Figure 1, comprising a vacuum processing chamber (column 6, rows 37 and 38) having a processing table (24) for supporting an object (W) to be processed and carrying out processing using a gas (using process gas supply unit, 5), the vacuum processing chamber having an axisymmetric structure (see overhead view of Figure 6), wherein the vacuum processing chamber has a double wall structure (inner and outer cylindrical vessels, 1 and 2) and comprises a gate valve (13; column 8, rows 38-40) for sealing an opening through which the object enters the processing chamber.

4. Okase further discloses a vacuum processing apparatus in Figure 1, comprising a vacuum processing chamber (column 6, rows 37 and 38) having a processing table (24) for supporting an object (W) to be processed and carrying out processing using a gas (using process gas supply unit, 5), the vacuum processing chamber having an axisymmetric structure (see overhead view of Figure 6) with respect to the object to be processed, wherein the vacuum processing chamber has a double wall structure (inner and outer cylindrical vessels, 1 and 2) and comprises a gate valve (13; column 8, rows 38-40) for sealing an opening formed to the chamber wall through which the object enters the processing chamber; and an inner vacuum processing chamber has a wall divided into two portions, and upper portion (above opening 41) and a lower portion (below opening 41), with the processing table interposed between the two portions.

5. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,192,827 to Welch et al.

6. Welch et al. disclose a vacuum processing apparatus in Figures 1-2 and 5 comprising a vacuum processing chamber (abstract) having a processing table (Figure 5, 220; column 6, rows 59-62) for supporting an object/substrate to be processed and carrying out processing using a gas (column 1, rows 27-28), the vacuum processing chamber having an axisymmetric structure (see overhead view of Figure 1) with respect to the object to be processed, wherein the vacuum processing chamber has a double wall structure (chamber body, 24 and liner 50) and comprises a gate valve (60) for sealing an opening formed to the chamber wall through which the object enters the processing chamber; and the shape of the gate valve for sealing the opening formed to the inner vacuum processing chamber is determined so that it does not interfere with the axisymmetric structure of the vacuum processing chamber (see Figures 2, 3B and 5; column 2, rows 11-20 and column 4, rows 32-35).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USP 5,592,581 discloses a processing apparatus with a double-walled structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Karla Moore  
Patent Examiner  
Art Unit 1763  
28 March 2005